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| APPLICATION NO.   | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|---|-----------------|----------------------|---------------------|------------------|--|
| 10/040,898  | 01/09/2002      | Jong-Hong Bae        | P67539US0           | 8890             |  |
| 43569   | 7590 12/30/2005 | EXAMINER             |                     |                  |  |
| MAYER, BROWN, ROWE & MAW LLP<br>1909 K STREET, N.W.<br>WASHINGTON, DC 20006 |                 |                      | CHEN,               | CHEN, TSE W      |  |
|   |                 |                      | ART UNIT            | PAPER NUMBER     |  |
|   |                 |                      | 2116                |                  |  |

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | Application No.  | Applicant(s)  |  |  |  |
|---|---|--|---|--|--|--|
| Office Action Summary   |   | 10/040,898   | BAE, JONG-HONG  |  |  |  |
|   |   | Examiner   | Art Unit  |  |  |  |
|   |   | Tse Chen   | 2116  |  |  |  |
| Period fo   | The MAILING DATE of this communication ap<br>or Reply   | pears on the cover sheet with t  | he correspondence address   |  |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any  | ORTENED STATUTORY PERIOD FOR REPLICHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. 9 period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutely reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICAT<br>136(a). In no event, however, may a reply<br>will apply and will expire SIX (6) MONTHS<br>le, cause the application to become ABAND | FION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133). |  |  |  |
| Status  |   |  |   |  |  |  |
| 1) 🖂  | Responsive to communication(s) filed on 22 July 2005.   |  |   |  |  |  |
| · —   | This action is <b>FINAL</b> . 2b) This action is non-final.   |  |   |  |  |  |
| ,   | ,—  |  |   |  |  |  |
| ,   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |  |   |  |  |  |
| Disposit  | ion of Claims   | •  |   |  |  |  |
| <b>4</b> )⊠   | 4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.   |  |   |  |  |  |
| , —   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |   |  |  |  |
| ·   | 5) Claim(s) 1-11 is/are allowed.  |  |   |  |  |  |
| 6)  |   |  |   |  |  |  |
| 7)  |   |  |   |  |  |  |
| ,   |   |  |   |  |  |  |
|   |   |  |   |  |  |  |
| Application Papers  |   |  |   |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |  |   |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |  |   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |   |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |  |   |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |  |   |  |  |  |
| Priority (  | ınder 35 U.S.C. § 119   |  |   |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |   |  |  |  |
| •   |   |  |   |  |  |  |
| Attachmen   |   |  |   |  |  |  |
| 2)  Notic<br>3)  Infor  | e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date  |  | mary (PTO-413)<br>ail Date<br>nal Patent Application (PTO-152)                              |  |  |  |

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### **DETAILED ACTION**

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment dated July 22, 2005.

2. Claims 1-11 are presented for examination.

# Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: -- MICROCONTROLLER WITH CONFIGURABLE PIN FOR OUTPUTTING CLOCK OR DATA SIGNALS --

### Claim Objections

4. Claims 2, 5-6, 9-11 are objected to because of the following informalities: "a clock signal" should be "the clock signal". Appropriate correction is required.

## Allowable Subject Matter

5. Claims 1-11 are allowed.

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6. The following is an examiner's statement of reasons for allowance: the claims are allowable because none of the references cited, either alone or in combination discloses or renders obvious a microcontroller of claim 1 and a system of claim 7, "comprising a first switch, enabled in a predetermined system mode, for transmitting an internal signal of the microcontroller to the clock output pin for using the clock output pin... a second switch... disabled in the predetermined system mode... a second clock generating means for providing a clock signal to the microcontroller through the clock input pin in the predetermined system mode".

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

#### Conclusion

8. This application is in condition for allowance except for the following formal matters:

The title and claims 2, 5-6, 9-11 need to be amended to overcome the objections as indicated above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tse Chen whose telephone number is (571) 272-3672. The examiner can normally be reached on Monday - Friday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tse Chen December 15, 2005

THOMAS LEE

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